

CLAIMSWhat Is Claimed Is:

1. A diagnostic agent for human cancer comprising a binding molecule that binds to one of glypican-1 and to syndecan-1 and a reporting molecule attachable to the binding molecule whereby a detection method can detect the presence of the binding molecule by detecting the 5 reporting molecule.
2. The diagnostic agent of Claim 1, wherein the binding molecule comprises an antibody.
3. The diagnostic agent of Claim 2, wherein the antibody is used to detect glypican-1 or syndecan-1 in a body fluid.
- 10 4. The diagnostic agent of Claim 2, wherein the antibody is used to image glypican-1 or syndecan-1.
5. A therapeutic agent for slowing growth of human cancer cells comprising a molecule that affects glypican-1 by one of binding to an extracellular region of glypican-1, cleaving an extracellular region of glypican- 15 1 and suppressing expression of an extracellular region of glypican-1.

6. The therapeutic agent of Claim 5, wherein the molecule comprises an antibody that binds to the extracellular region of glypican-1.

7. The therapeutic agent of Claim 5, wherein the molecule comprises an enzyme that digests a portion of the extracellular region of
5 glypican-1.

8. The therapeutic agent of Claim 5, wherein the molecule comprises a nucleic acid molecule that suppresses expression of the extracellular region of glypican-1.

9. A method for diagnosing human cancer comprising the
10 steps of contacting a molecule that binds to one of glypican-1 and syndecan-1 with either a body fluid or body tissue, and detecting the molecule bound to glypican-1 or to syndecan-1.

10. The method of Claim 9, wherein the binding molecule comprises an antibody.

15 11. The method of Claim 10, wherein the antibody is used to detect glypican-1 or syndecan-1 in a body fluid.

-53-

12. The method of Claim 10, wherein the antibody is used to image glypican-1 or syndecan-1.

13. A method of slowing growth of human cancer cells comprising administering a molecule that affects glypican-1 by one of binding
5 to an extracellular region of glypican-1, cleaving an extracellular region of glypican-1 and suppressing expression of an extracellular region of glypican-1.

14. The method of Claim 13, wherein the molecule comprises an antibody that binds to the extracellular region of glypican-1.

10 15. The method of Claim 13, wherein the molecule comprises an enzyme that digests a portion of the extracellular region of glypican-1.

16. The method of Claim 13, wherein the molecule comprises a nucleic acid molecule that suppresses expression of the extracellular region of glypican-1.